

**DEPARTMENT OF TRANSPORTATION**

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch

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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:**Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-003871**Date Inspected:** 08-Sep-2008**Project Name:** SAS Superstructure**OSM Arrival Time:** 630**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1530**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Lvliqing and Zhashi**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** OBG and SAS Tower Fabrication**Summary of Items Observed:**

On this date, Caltrans Office of Structural Material (OSM) Quality Assurance (QA) Inspector Joselito Lizardo was present as requested to perform observations on the fabrication of Orthotropic Box Girder (OBG) and SAS Tower at Zhenhua Port Machinery Company (ZPMC) facility at Changxing Island, in Shanghai, China.

The QA Inspector has randomly observed the following activities on sub-assembly Bays mentioned below;

Bay 2: 114M Tower Mock-ups, Plate Cutting, Rolling

This QA Inspector observed machining/beveling of 1-38mm thick plate marked P1197 and 2-40mm thick plate marked P482 and P481 for tower diaphragm plate seen in progress. Rolling of 1-70mm thick plate marked P100 also seen in progress. No Caltrans job at the cutting table.

Bay 3: OBG side/bottom/edge panel

Tack/fit-up of 7-WT (W21x57) rib stiffener to various side plates SP098-001-015~028 and 6-WT(W21x57) rib stiffener to side plate SP365-001-013~024 using THJ506Fe-1 was also noted. No welding works at gantry #1 and #2 at the moment.

Bay 4: Tower Diaphragm

This QA observed four ZPMC welders ID #068250, ID #068918, ID #066268 and ID #037779 SMAW(2G) PJP welding fill pass on 40mm web plate to tower double diaphragm(bottom) WSD1-SA318B/B weld joints 1 and 2. ZPMC welders were noted utilizing Excalibur E9018M H4R, 4.8mm diameter electrode. The QA Inspector randomly observed ZPMC CWI Zhashi monitoring weld parameters.

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## WELDING INSPECTION REPORT

( Continued Page 2 of 2 )

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This QA observed ZPMC/NDE perform 100% MT on fillet welds of rib stiffener to deck plate DP733A. This QA also performed 10% MT on weld joints just mentioned. This QA also observed another ZPMC/NDE perform 10% MT on fillet welds of rib stiffener to edge plate EP181-001-003. In this inspection, ZPMC/NDE found slag inclusion on one of the welds tested that required a repair. For further details regarding this inspection, please see my TL-6028 on this date.

### Bay 8: Tower Diaphragm

This QA observed two ZPMC welders ID #067081, and ID #045246 SMAW(2G) PJP welding fill pass on 40mm web plate to tower double diaphragm(bottom) ESD1-SA301B/B weld joints 3 and 4. ZPMC welders were noted utilizing Excalibur E9018M H4R, 4.8mm diameter electrode. The QA Inspector randomly observed ZPMC CWI Lvlqing monitoring weld parameters.

### Summary of Conversations:

No significant conversation occurred today.

### Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Joshua Ishibashi, (858) 232-7081, who represents the Office of Structural Materials for your project.

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<b>Inspected By:</b>	Lizardo, Joselito
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Quality Assurance Inspector
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<b>Reviewed By:</b>	Cuellar, Robert
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QA Reviewer
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